



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED**OCT 04 2012**

David Keniston, School Business Manager
City of Peabody
21 Johnson Street
Peabody, Massachusetts 01960

Re: PCB Risk-Based Disposal Approval under 40 CFR § 761.61(c) and § 761.79(h)
City of Peabody Burke Elementary School

Dear Mr. Keniston:

This is in response to the Notification¹ by the City of Peabody for approval of a risk-based plan to address PCB caulk and building materials at the Burke Elementary School located at 127 Birch Street in Peabody, (the Site). The Site contains PCB-contaminated materials that exceed the allowable PCB levels under the federal PCB regulations at 40 CFR §§ 761.20, 761.61(a), and 761.62. Specifically, PCBs have been identified in caulk and glazing; in surrounding concrete and brick substrates; and, on *non-porous surfaces* (e.g. window frames, laminate sills and univents).

The City has proposed a risk-based disposal plan under 40 CFR § 761.61(c) and § 761.79(h) for the PCB-contaminated wastes that includes the following activities:

1. Remove window and door systems and associated *PCB Bulk Product Waste* (i.e., window and door surround sealants, and interior sealant between window and metal heater) throughout the Site. Dispose of all wastes as a greater than or equal to (\geq) 50 parts per million (ppm) PCB waste unless PCB and asbestos containing sealants are fully removed from *non-porous surfaces* (metal and glass) and the *non-porous surfaces* are decontaminated in accordance with 40 CFR 761.61(a)(5)(ii).

¹ Information was submitted by ATC on behalf of the City to support a risk-based disposal approach for *PCB Remediation Waste* under 40 CFR § 761.61(c) and § 761.79(h). Information was provided dated April 23, 2012 (TSCA Risk-Based Cleanup of PCBs); July 2012 (Response to EPA Questions and Revised Risk-Based Plan); September 19, 2012 (Revised TSCA Risk-Based Cleanup of PCBs under 40 CFR 761); October 2, 2012 (email waste disposal); and October 3, 2012 (email remedial activity clarification). These submissions will be referred to as the "Notification."

2. Remove and dispose of the following as a ≥ 50 ppm *PCB Remediation Waste*, except *non-porous surfaces* (i.e., metal and glass) may be decontaminated in accordance with 40 CFR § 761.61(a)(5)(ii):
 - a. Interior wooden window sills in rooms 101, 108, 109, 116, 201 and 208
 - b. Interior and exterior wood trim in direct contact with window surround caulk
 - c. Exterior univent louvers
 - d. Filters and insulation associated with univents
3. Remaining *porous* and *non-porous surfaces* where PCB containing sealants are removed will be cleaned using HEPA vacuums and then decontaminated with hexane (or other acceptable solvent) unless these surfaces removed for disposal. These surfaces include:
 - a. Window and door surround masonry surfaces (CMU and poured concrete) within one foot of surround caulk on the interior and exterior side
 - b. Window and door brick surround within 6-inches from the window or door surround caulk except for cafeteria and gymnasium
 - c. Exterior poured concrete window sills
 - d. Exterior metal siding in direct contact with a window surround caulk
 - e. Doors that will be reinstalled
 - f. Outside the univent metal case and lateral vents
 - g. Internal accessible portions of univents: surfaces shall be cleaned so as to remove all visible oil, grease, grime and dust. All interior and exterior metal surfaces shall be cleaned, including the interior of lateral vents that emanate from univent system
 - h. Removed associated univent cabinet system surfaces prior to reinstallation
 - i. Window sill flashing in direct contact and within one foot of window caulk
4. Encapsulate painted CMU and interior poured concrete surfaces (if present) to a distance of one foot of either side of window surround caulk (interior and exterior). Encapsulate the brick window surround in the first and second floor rear boys' and girls' bathrooms in a similar manner. The encapsulation shall be comprised of a two layer coating system.
5. Extend new exterior window sill flashing and/or physical barrier over entire exterior poured concrete window sill to serve as the concrete sill encapsulant.
6. Remove and replace old motors located within univents.
7. Record a notation on the deed to document that PCBs at > 1 ppm remain at the Site.
8. Implement a long-term monitoring and maintenance plan (MMP) for encapsulated *porous surfaces* and for indoor air.

Based on the EPA's review, the proposed plan is acceptable and will create no unreasonable risk when conducted in accordance with the Notification and this Approval and the conditions of Attachment 1. EPA applies this unreasonable risk standard in accordance with the PCB regulations at 40 CFR §761.61(c), and the Toxic Substances Control Act, at 15 USC § 2605(e).

The City may proceed with its project in accordance with 40 CFR § 761.61(c); § 761.62(a); § 761.79(h); its Notification; and this Approval, subject to the conditions of Attachment 1. Please be aware that this Approval requires the City to continue its outreach activities for the school community on the PCB remediation work and on the long-term monitoring (see Attachment 1, Conditions 12 and 22).

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527 / Facsimile: (617) 918-0527

Under this Approval, EPA is reserving its right to require additional investigation or mitigation measures should the results of the initial post-abatement sampling or the results of the long-term monitoring sampling indicate an unreasonable risk to the building users. This Approval does not release the City from any applicable requirements of federal, state or local law, including the requirements related to cleanup and disposal of PCBs or other contaminants under the Massachusetts Department of Environmental Protection (MassDEP) regulations.

EPA shall consider this project complete only when it has received documents evidencing completion of the encapsulation and demonstration of encapsulation effectiveness, disposal of PCB waste, and execution of the deed restriction. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,



James T. Owens III, Director
Office of Site Remediation & Restoration

Attachment 1

cc: Mike Gitten, ATC
Sharon Cameron, Director - Peabody Health Department
File

ATTACHMENT 1:

**PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS
BURKE ELEMENTARY SCHOOL ("the Site")
127 BIRCH STREET / PEABODY, MASSACHUSETTS**

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to *PCB remediation waste and PCB bulk product waste* located at the Site and identified in the Notification.²
2. The City of Peabody (the City) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the activities described in the Notification differ from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. The City must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, the City shall contact EPA within twenty-four (24) hours for direction on sampling and cleanup requirements.
6. The City is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time the City has or receives information indicating that the City or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within twenty-four (24) hours of having or receiving the information.
7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by the City are authorized to conduct the activities set forth in the Notification. the City is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

² Information was submitted by ATC on behalf of the City to support a risk-based disposal approach for *PCB Remediation Waste* under 40 CFR § 761.61(c) and § 761.79(h). Information was provided dated April 23, 2012 (TSCA Risk-Based Cleanup of PCBs); July 2012 (Response to EPA Questions and Revised Risk-Based Plan); September 19, 2012 (Revised TSCA Risk-Based Cleanup of PCBs under 40 CFR 761); October 2, 2012 (email waste disposal); and October 3, 2012 (email remedial activity clarification). These submissions will be referred to as the "Notification."

8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release the City from compliance with any applicable requirements of federal, state or local law; or 3) release the City from liability for, or otherwise resolve, any violations of federal, state or local law.
9. Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

NOTIFICATION AND CERTIFICATION CONDITIONS

10. This Approval may be revoked if the EPA does not receive written notification from the City of its acceptance of the conditions of this Approval within ten 10 business days of receipt.
11. Prior to initiating onsite work under this Approval, the City shall submit the following information for EPA review and/or approval:
 - a. a certification signed by its selected contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval; and,
 - b. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the analytical and quality assurance requirements specified in the Notification and in this Approval.

REMEDIAL AND DISPOSAL CONDITIONS

12. The City shall continue its outreach activities for the school community on the PCB remediation work and on the long-term maintenance and monitoring activities (see Condition 22).
13. To the maximum extent practical, engineering controls shall be utilized to minimize the potential for PCB releases during the abatement. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.

14. *PCB bulk product waste* and *PCB remediation waste* shall be removed and/or decontaminated and verification sampling and analysis shall be conducted as described below:
- a. All visible residues of PCB caulk (i.e. *Bulk Product Waste*) and associated wastes shall be removed and disposed of as described in the Notification.
 - b. PCB-contaminated *non-porous surfaces* shall be removed and/or decontaminated to achieve a less than or equal to (\leq) $1 \mu\text{g}/100 \text{ cm}^2$ for accessible surfaces and $\leq 10 \mu\text{g}/100 \text{ cm}^2$ for non-accessible surfaces. Verification sampling shall be conducted as described in the Notification.
 - c. PCB-contaminated *porous surfaces* (e.g., concrete door thresholds and brick) shall be decontaminated to achieve a cleanup standard of ≤ 1 part per million (ppm). Verification sampling shall be conducted as described in the Notification. Alternatively, or in the event the PCB cleanup standard cannot be achieved, PCB-contaminated *porous surfaces* shall be encapsulated as described in the Notification.
 - d. PCB-contaminated *porous surfaces* shall be coated as described in the Notification with a minimum of two (2) coats of an epoxy and/or acrylic-based coating.
 - i) Following encapsulation of PCB-contaminated *porous surfaces*, post-encapsulation sampling shall be conducted to determine the effectiveness of the encapsulation.
 - (1) Wipe sampling of encapsulated surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. $\mu\text{g}/100 \text{ cm}^2$). Samples shall be collected in locations where building substrate PCB concentrations are expected to be elevated (i.e., close proximity to a caulk joint).
 - (2) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
 - ii) In the event that the PCB concentration in a wipe sample is greater than ($>$) $1 \mu\text{g}/100 \text{ cm}^2$, and the surface standard cannot be achieved by the application of additional encapsulants/coatings, the City shall contact EPA for further discussion and direction on alternatives.

15. Following encapsulation of PCB-contaminated *porous surfaces*, initial indoor surface wipe sampling and indoor air sampling shall be conducted to determine the effectiveness of the containment and remedial activities:
 - a. *Surface Wipe Sampling*
 - i) A minimum of 6 surface wipe samples of accessible indoor surfaces (e.g., desks, floors) shall be collected on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. $\mu\text{g}/100\text{ cm}^2$).
 - ii) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
 - iii) In the event that the PCB concentration of any surface wipe sample is greater than ($>$) $1\text{ }\mu\text{g}/100\text{ cm}^2$, cleaning of these surfaces shall be performed and additional sampling shall be conducted to confirm that the $\leq 1\text{ }\mu\text{g}/100\text{ cm}^2$ PCB standard has been achieved.
 - b. *Indoor Air Sampling*
 - i) Indoor air sampling shall be conducted in accordance with EPA Method TO-4A or TO-10A. Sufficient sample volumes shall be collected to provide a minimum laboratory reporting limit of less than ($<$) $0.05\text{ }\mu\text{g}/\text{m}^3$ for total PCBs. At a minimum, PCB analysis shall include PCB homologues and/or PCB congeners.
 - ii) In the event that PCB air sample results are $> 100\text{ ng}/\text{m}^3$, the City shall contact EPA for further discussion on indoor air alternatives.
 - c. The City shall provide the results of this sampling to EPA within 7 days of receiving the analytical results of the initial air and wipe sampling. These results shall also be included in the Final Completion Report (see Condition 29).
16. The City shall submit a long-term monitoring and maintenance plan (MMP) to monitor the long-term effectiveness of the encapsulants. (See Condition 22).

17. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with § 761.40; stored in a manner prescribed in § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below:
 - a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
 - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
 - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

DEED RESTRICTION AND USE CONDITIONS

18. Within 45 days of completing the activities described in the Notification and in the Approval, the City shall submit for EPA review and approval, a draft deed restriction for the Site. The deed restriction shall include: a description of the extent and levels of contamination at the Site following abatement; a description of the actions taken at the Site; a description of the use restrictions for the Site, if applicable; and, the long-term monitoring and maintenance requirements on the Site, which may be addressed by the MMP (see Condition 22). Within seven (7) days of receipt of EPA's approval of the draft deed restriction, the City shall record the deed restriction. A copy of this Approval shall be attached to the deed restriction.
19. The City and any subsequent owner, lessee, or transferee seeking the benefit of this Approval, shall notify the EPA of the sale, lease or transfer of any portion of the Site, in writing, no later than thirty (30) days prior to any sale, lease or transfer. This notification shall include the name, address, and telephone number of the new owner(s), lessee(s) or transferee(s). In the event that the City sells, leases or transfers any portion of the Site, the City shall continue to be bound by all the terms and conditions of this Approval, except as provided below. EPA may allocate some or all of this Approval's responsibilities to a new owner, lessee or transferee through the issuance of a modification of this Approval ("Owner Modification") as follows:
 - a. The City and the new owner(s), lessee(s) or transferee(s) must request, in writing, that the EPA issue an Owner Modification to the new owner(s), lessee(s) or transferee(s) which transfers some or all responsibilities to comply with the terms and conditions of this Approval to that entity or entities;
 - b. The EPA reviews the request, and determines whether to issue an Owner Modification;

- c. EPA provides a draft Owner Modification for comment by the requesting party(ies) and, following its receipt and review of any written comments, EPA shall provide the final Owner Modification to the party(ies); and,
 - d. The new owner(s), lessee or transfer entity provides written notification to the EPA of its acceptance of and intention to comply with the terms and conditions of the final Owner Modification. The Owner Modification may be withdrawn if the EPA does not receive written notification from the new owner(s), lessee(s) or transferee(s) of its acceptance of, and intention to comply with, the terms and conditions of the Owner Modification within thirty (30) days of the date of the Owner Modification. Under such circumstances, all terms and conditions of this Approval will continue to be binding on the City.
20. In the event that the sale, lease or transfer of the Site will involve or result in a change in the use of the Site, EPA may revoke, suspend, and/or modify this Approval or the Owner Modification if it finds, due to the change in use, that this risk-based disposal action will not be protective of health or the environment. The new owner shall record any amendment to the deed restriction, resulting from any approved modification(s), within sixty (60) days of such change(s).
21. In any sale, lease or transfer of the Site, the City shall retain sufficient access rights to enable it to continue to meet the obligations under this Approval for long-term maintenance and monitoring of the Site, except as provided otherwise in a re-issued approval.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

22. Longer-term indoor air sampling and surface sampling (**both** encapsulated and non-encapsulated surfaces) for PCBs shall be conducted to determine the long-term efficacy and effectiveness of the abatement measures at the Site.
- a. Within 45 days of completion of the work authorized under this Approval, the City shall submit for EPA's review and approval, a detailed *Maintenance and Monitoring Plan for Polychlorinated Biphenyls* (MMP) for surfaces and for indoor air. The City shall incorporate any changes to the MMP required by EPA.
 - b. The MMP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and reporting requirements.
 - c. The MMP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users.

- d. The MMP also shall include a worker training component for maintenance workers or for any person that will be conducting work that could impact the encapsulants and/or physical barriers.
 - e. Results of the long-term indoor air and surface wipe sampling shall be provided in writing, to EPA within 15 business days of receipt of the laboratory results. In the event that PCB concentrations in the wipe samples are $> 1 \mu\text{g}/100 \text{ cm}^2$ or, in the air samples are $> 100 \text{ ng}/\text{m}^3$ (unless an alternative standard has been developed), the City shall notify EPA within 24 hours of receiving the results and shall describe actions that will be taken to investigate and/or address the exceedence(s).
 - f. Based on its review of the results, EPA may determine that modification to the MMP is necessary in order to monitor and/or evaluate the long-term effectiveness of the coatings. Activities required under the MMP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.
23. Any modification(s) in the plan, specifications, or information submitted by the City, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. The City shall inform the EPA of any modification, in writing, at least 10 business days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this risk-based abatement plan may pose an unreasonable risk of injury to health or the environment due to the change in Site use. EPA may take similar action if the EPA does not receive requested information needed from the City to make a determination regarding potential risk.
24. Approval for these activities may be revoked, modified or otherwise altered: if EPA finds a violation of the conditions of this Approval or of 40 CFR Part 761, including EPA's PCB Spill Cleanup Policy, or other applicable rules and regulations; if EPA finds that these activities present an unreasonable risk to public health or the environment; if EPA finds that there is migration of PCBs from the Site; or if EPA finds that changes are necessary to comply with new rules, standards, or guidance for such approvals. The City may apply for appropriate modifications in the event new rules, standards, or guidance comes into effect.
25. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

26. Any misrepresentation or omission of any material fact in the Notification or in any future records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
27. The City shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by the City to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

RECORDKEEPING AND REPORTING CONDITIONS

28. The City shall prepare and maintain all records and documents required by 40 CFR Part 761, including, but not limited to, the records required by Subparts J and K. The City shall maintain a written record of the cleanup and the analytical sampling for activities conducted under this Approval at the Site. All records shall be made available for inspection by authorized representatives of the EPA, until such time as EPA approves in writing a request for an alternative disposition of such records.
29. The City shall submit a Final Completion Report (Report) to the EPA in both electronic and hard copy, within 120 days of completion of the activities described under this Approval. At a minimum, this Report shall include: a discussion of the project activities with photo-documentation; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCBs removed and disposed off-site; copies of manifests; and, copies of certificates of disposal or similar certifications issued by the disposer, if applicable. The Report shall also include a copy of the recorded deed restriction and a certification signed by a City official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.
30. As required under Condition 22 of this Approval, the City shall submit the results of the long-term monitoring and maintenance activities to EPA.
31. Required submittals shall be mailed to:

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, Massachusetts 02109-3912
32. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self disclosure or penalty policies.

END OF ATTACHMENT 1

